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# PATENT ABSTRACTS OF JAPAN

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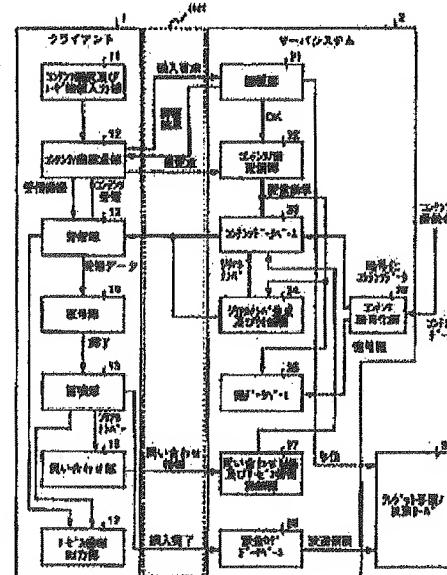
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(54) ON-LINE MERCHANDISE MANAGEMENT SYSTEM, SERVER SYSTEM TO BE APPLIED TO ON-LINE MERCHANDISE MANAGEMENT SYSTEM, TERMINAL TO BE APPLIED TO ON-LINE MERCHANDISE MANAGEMENT SYSTEM, MANAGING METHOD IN ON-LINE MERCHANDISE MANAGEMENT SYSTEM AND COMPUTER READABLE RECORD MEDIUM STORING PROGRAM MAKING COMPUTER PERFORM THE METHOD

(57)Abstract:

**PROBLEM TO BE SOLVED:** To effectively execute operation of service, etc., after a commercial transaction by sharing a serial number to specify contents and a purchaser of the contents on a system.

**SOLUTION:** When purchase is requested from the client 1 to a server system 2, authentication is executed by credit between the server system 2 and a credit/settlement server 3, as a result of the authentication, when the purchase is permitted to the purchaser, required contents, a serial number to specify the contents and the purchaser of the contents are distributed from the server system 2 to the client 1 as the purchaser. Thus, unitary management of correspondence relation between the contents and the purchaser is executed on the system. After that, when purchase completion notice is transferred from the client 1 to the server system 2, a charging processing of the purchaser is executed in the server system 2.



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**CLAIMS**

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**[Claim(s)]**

[Claim 1]A server system which is connected to a network, builds virtually an e-market formed of two or more contents on the network concerned, and controls contents selling and its fee collection through said e-market, 1 or two or more terminal units which are connected to said network, access said e-market, and control content purchase, When contents selling is performed from said server system to said terminal unit via a preparation and said network, While transmitting information which added a serial number which specifies contents concerned and a buyer as contents in which the terminal unit concerned carries out a purchase request from said server system to said terminal unit, An on-line merchandise management system managing correspondence relation between contents and a buyer by a serial number.

[Claim 2]A server system which is connected to a network, builds virtually an e-market formed of two or more contents on the network concerned, and controls contents selling and its fee collection through said e-market, 1 or two or more terminal units which are connected to said network, access said e-market, and control content purchase, When accounting is performed by contents selling to said terminal unit from said server system via a preparation and said network, An on-line merchandise management system characterized by managing correspondence relation between contents and a buyer by a serial number while transmitting a serial number which specifies contents and a buyer whom the terminal unit concerned purchased from said server system to said terminal unit.

[Claim 3]When an inquiry about said purchased contents is performed from said terminal unit to said server system, The on-line merchandise management system according to claim 1 or 2 transmitting information which added said serial number which specifies the purchased contents concerned as an inquiry from said terminal unit to said server system.

[Claim 4]When sending servicing information about contents from said server system to said terminal unit, a buyer is specified from contents, Claim 1 transmitting information which added servicing information of the contents concerned to said serial number which specifies contents purchased from said server system with the terminal unit concerned to a terminal unit equivalent to said buyer, 2, or an on-line merchandise management system given in 3.

[Claim 5]An on-line merchandise management system comprising:

A server system which is connected to a network, builds virtually an e-market formed of two or more contents on the network concerned, and controls contents selling and its fee collection through said e-market.

It is connected to said network, have 1 or two or more terminal units which access said e-market and control content purchase, and said terminal unit, A request means which requires necessary contents of said server system in said e-market built on said network, Said necessary contents distributed from said server system with a demand of said request means, A reception means which receives a serial number which specifies contents and a buyer who are added and distributed to the contents concerned, Have a memory measure which memorizes necessary contents received by said reception means, and its serial number, and said server system, A serial number creating means which generates said serial number corresponding to said necessary contents with a demand of said request means, A management tool which manages

correspondence relation between a serial number generated by said serial number creating means and its contents, A distribution means which adds and distributes a serial number generated by said serial number creating means to said necessary contents demanded by said request means from said terminal unit.

[Claim 6]A server system which is connected to a network, builds virtually an e-market formed of two or more contents on the network concerned, and controls contents selling by encryption, and its fee collection through said e-market, It is connected to said network, have 1 or two or more terminal units which control content purchase which accesses said e-market and requires a decoding, and said terminal unit, A request means which requires necessary contents of said server system in said e-market built on said network, When said necessary contents are received by distribution of said server system with a demand of said request means, after transmitting said predetermined notice by reporting means which transmits a predetermined notice to said server system, and said reporting means, . Make it correspond to contents received from said server system, and distribute. A memory measure which matches and memorizes said received contents necessary [ said ] and said serial number when a serial number which specifies contents concerned and a buyer is received, A distribution means which \*\*\*\* and distributes said necessary contents as which said server system was required by said request means of said terminal unit, A charging means which performs accounting when said predetermined notice has been transmitted by said reporting means, after distributing said necessary contents by said distribution means, A serial number creating means which generates said serial number corresponding to said necessary contents distributed by said distribution means after accounting is performed by said charging means, A management tool which manages correspondence relation between a serial number generated by said serial number creating means and its contents, An on-line merchandise management system having a distribution means which distributes a serial number generated by said serial number creating means to said terminal unit.

[Claim 7]The on-line merchandise management system according to claim 5 or 6, wherein said server system has a database which manages correspondence relation between contents, a serial number, and servicing information.

[Claim 8]When said terminal unit performs an inquiry about said necessary contents to said server system, Transmit information which added said serial number which specifies the necessary contents concerned as an inquiry to said server system, and said server system, The on-line merchandise management system according to claim 7 taking out servicing information corresponding to said serial number added and transmitted in the case of an inquiry from said database, and replying to said terminal unit.

[Claim 9]When said server system's sending servicing information about contents to said terminal unit, while specifying a buyer from the contents concerned with reference to said database, The on-line merchandise management system according to claim 7 or 8 transmitting information which added servicing information of the contents concerned to a serial number which specifies the contents concerned to a terminal unit equivalent to said buyer.

[Claim 10]A server system which is connected to a network, builds virtually an e-market formed of two or more contents on the network concerned, and controls contents selling and its fee collection through said e-market, 1 or two or more terminal units which are connected to said network, access said e-market, and control content purchase, A serial number creating means which is a server system of a \*\*\*\*\* on-line merchandise management system, and generates a serial number which specifies the contents concerned corresponding to necessary contents, and its buyer with a demand of said terminal unit, A management tool which manages correspondence relation between a serial number generated by said serial number creating means and its contents, A server system of an on-line merchandise management system provided with a distribution means which adds and distributes a serial number generated by said necessary contents by said serial number creating means to said terminal unit.

[Claim 11]A server system which is connected to a network, builds virtually an e-market formed of two or more contents on the network concerned, and controls contents selling by encryption,

and its fee collection through said e-market, 1 or two or more terminal units which control content purchase which is connected to said network, accesses said e-market, and requires a decoding, A distribution means which distributes necessary contents which are the server systems of a \*\*\*\*\* on-line merchandise management system, and were demanded by said terminal unit, A charging means which performs accounting after distributing said necessary contents by said distribution means, A serial number creating means which generates a serial number which specifies the contents concerned corresponding to said necessary contents distributed by said distribution means, and its buyer after accounting is performed by said charging means, A management tool which manages correspondence relation between a serial number generated by said serial number creating means and its contents, A server system of an on-line merchandise management system provided with a distribution means which distributes a serial number generated by said serial number creating means to said terminal unit.

[Claim 12]A server system of the on-line merchandise management system according to claim 10 or 11, wherein said server system has a database which manages correspondence relation between contents, a serial number, and servicing information.

[Claim 13]When said on-line merchandise management system performs an inquiry about said necessary contents from said terminal unit to said server system, It is a system which transmits information which added said serial number which specifies the necessary contents concerned as an inquiry to said server system.

A server system of the on-line merchandise management system according to claim 12, wherein said server system takes out servicing information corresponding to said serial number added and transmitted in the case of an inquiry from said database and answers it to said terminal unit.

[Claim 14]When sending servicing information about contents to said terminal unit, while specifying a buyer from the contents concerned with reference to said database, A server system of the on-line merchandise management system according to claim 12 or 13 transmitting information which added servicing information of the contents concerned to a serial number which specifies the contents concerned to a terminal unit equivalent to said buyer.

[Claim 15]A server system which is connected to a network, builds virtually an e-market formed of two or more contents on the network concerned, and controls contents selling and its fee collection through said e-market, It is connected to said network, have 1 or two or more terminal units which access said e-market and control content purchase, and said server system, A serial number which specifies necessary contents concerned and a buyer corresponding to contents with a demand of said terminal unit is generated, It is a terminal unit of an on-line merchandise management system having a means to add and distribute said generated serial number to said necessary contents, A request means which requires necessary contents of said server system in said e-market built on said network, A reception means which receives a serial number added and distributed to contents necessary [ said ] distributed from said server system with a demand of said request means, and the contents concerned, A terminal unit of an on-line merchandise management system provided with a memory measure which matches and memorizes necessary contents and a serial number received by said reception means.

[Claim 16]A server system which is connected to a network, builds virtually an e-market formed of two or more contents on the network concerned, and controls contents selling by encryption, and its fee collection through said e-market, It is connected to said network, have 1 or two or more terminal units which control content purchase which accesses said e-market and requires a decoding, and said server system, After it performs accounting after distributing necessary contents demanded by said terminal unit, and the accounting is performed, It is a terminal unit of an on-line merchandise management system having a means to distribute a serial number which specifies contents concerned and a buyer corresponding to said necessary contents, A request means which requires necessary contents of said server system in said e-market built on said network, When said necessary contents are received by distribution of said server system with a demand of said request means, after transmitting said predetermined notice by reporting means which transmits a predetermined notice to said server system, and said reporting means, When a serial number which makes correspond to said received necessary contents, and is distributed

from said server system is received, A terminal unit of an on-line merchandise management system provided with a memory measure which matches and memorizes a serial number received corresponding to said received necessary contents and the contents concerned.

[Claim 17] Said on-line merchandise management system is a system which answers servicing information corresponding to a serial number added and transmitted from said terminal unit in the case of an inquiry to said terminal unit in said server system.

When said terminal unit performs an inquiry about said necessary contents to said server system, A terminal unit of the on-line merchandise management system according to claim 15 or 16 transmitting information which added said serial number which specifies the necessary contents concerned as an inquiry to said server system.

[Claim 18] A server system which is connected to a network, builds virtually an e-market formed of two or more contents on the network concerned, and controls contents selling and its fee collection through said e-market, 1 or two or more terminal units which are connected to said network, access said e-market, and control content purchase, The 1st process of requiring necessary contents in said e-market which is a management method of a \*\*\*\*\* on-line merchandise management system, and was built from said terminal unit on said network to said server system, With a demand of said 1st process, from said server system to said terminal unit Said necessary contents, The 2nd process of transmitting a serial number which specifies contents and a buyer who are added and distributed to the contents concerned, A management method of said terminal unit and an on-line merchandise management system including the 3rd process of matching and managing contents necessary [ said ] and its serial number with said each of server system.

[Claim 19] A server system which is connected to a network, builds virtually an e-market formed of two or more contents on the network concerned, and controls contents selling by encryption, and its fee collection through said e-market, 1 or two or more terminal units which control content purchase which is connected to said network, accesses said e-market, and requires a decoding, The 1st process of requiring necessary contents of said server system in said e-market which is a management method of a \*\*\*\*\* on-line merchandise management system, and was built from said terminal unit on said network to said server system, The 3rd process of performing accounting in said server system when said necessary contents are received from said server system to said terminal unit with a demand of said 1st process, The 4th process of transmitting a serial number which specifies contents concerned and a buyer corresponding to said necessary contents after accounting by said 3rd process from said server system to said terminal unit, The 5th process of matching and managing contents necessary [ said ] and its serial number with said terminal unit and said each of server system, it is \*\*\*\*\* --- a management method of an on-line merchandise management system characterized by things.

[Claim 20] In the 6th process of transmitting information which added a serial number which specifies the contents concerned as an inquiry of contents from said terminal unit to said server system, and said server system, A management method of the on-line merchandise management system according to claim 18 or 19 including further the 7th process of answering servicing information about said serial number transmitted by said 6th process to said terminal unit.

[Claim 21] When sending servicing information about contents from said server system to said terminal unit, while specifying a buyer from contents according to said serial number managed, A management method of the on-line merchandise management system according to claim 18, 19, or 20 including further the 8th process of transmitting information which added servicing information of the contents concerned to a serial number which specifies the contents concerned to a terminal unit equivalent to said buyer.

[Claim 22] A recording medium recording a program which makes a computer perform a method indicated to any one of said the Claims 18-21 and in which computer reading is possible.

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**DETAILED DESCRIPTION**

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**[Detailed Description of the Invention]****[0001]**

[Field of the Invention]This invention, In the e-market virtually built on the network. The contents used as goods. A management method in the terminal unit and on-line merchandise management system which are applied to the on-line merchandise management system in which it trades on-line, the server system applied to an on-line merchandise management system, and an on-line merchandise management system, and a method for the same. It is related with the recording medium which recorded the program which a computer is made to execute and in which computer reading is possible.

**[0002]**

[Description of the Prior Art]Conventionally, in the on-line shopping using an e-market, digital products, such as application software, are dealt in as contents. It is a mechanism in which a buyer chooses necessary contents from various kinds of contents displayed on the screen of a personal computer, and demands purchase of the center, i.e., vendor, side in this on-line shopping.

[0003]In the system by the side of a buyer, if dealing is made in connection with contents selling, accounting will be carried out. Storage and File Management Sub-Division of each user's purchase situation is carried out by this accounting.

**[0004]**

[Problem to be solved by the invention]However, the system of the on-line shopping mentioned above, Since it was an e-market aiming at selling contents, additional service of providing other contents information which are made in the manufacturer of the upgrade information about the sold contents or its contents was not prudent yet.

[0005]In order that this invention may solve the problem by the conventional example mentioned above, Employment of the service after a commercial transaction, etc. A charging method in the terminal unit and on-line merchandise management system which are applied to the on-line merchandise management system which can be carried out efficiently, the server system applied to an on-line merchandise management system, and an on-line merchandise management system, and a method for the same. It aims at providing the recording medium which recorded the program which a computer is made to execute and in which computer reading is possible.

**[0006]**

[Means for solving problem]In order to solve SUBJECT mentioned above and to attain the purpose, the on-line merchandise management system concerning invention of Claim 1, The server system which is connected to a network, builds virtually the e-market formed of two or more contents on the network concerned, and controls contents selling and its fee collection through said e-market, 1 or two or more terminal units which are connected to said network, access said e-market, and control content purchase, When contents selling is performed from said server system to said terminal unit via a preparation and said network, While transmitting the information which added the serial number which specifies the contents concerned and buyer as the contents in which the terminal unit concerned carries out a purchase request from said server system to said terminal unit, the correspondence relation between contents and a

buyer is managed by a serial number.

[0007]According to invention of this Claim 1, in contents selling. While transmitting information which added a serial number which specifies contents concerned and a buyer as contents in which the terminal unit concerned carries out a purchase request from a server system to a terminal unit, Since correspondence relation between contents and a buyer was managed by a serial number, A serial number which specifies contents and its buyer on a system on the basis of contents transfer timing can be shared, and it is possible to employ service after a commercial transaction, etc. efficiently by this.

[0008]An on-line merchandise management system concerning invention of Claim 2, A server system which is connected to a network, builds virtually an e-market formed of two or more contents on the network concerned, and controls contents selling and its fee collection through said e-market, 1 or two or more terminal units which are connected to said network, access said e-market, and control content purchase, When accounting is performed by contents selling to said terminal unit from said server system via a preparation and said network, While transmitting a serial number which specifies contents and a buyer whom the terminal unit concerned purchased from said server system to said terminal unit, correspondence relation between contents and a buyer is managed by a serial number.

[0009]When accounting is performed by contents selling to a terminal unit from a server system via a network according to invention of this Claim 2, While transmitting a serial number which specifies contents and a buyer whom the terminal unit concerned purchased from a server system to a terminal unit, Since correspondence relation between contents and a buyer was managed by a serial number, A serial number which specifies contents and its buyer on a system on the basis of fee collection timing can be shared, and it is possible to employ service after a commercial transaction, etc. efficiently by this.

[0010]An on-line merchandise management system concerning invention of Claim 3, When an inquiry about said purchased contents is performed from said terminal unit to said server system in Claim 1 or invention of 2, Information which added said serial number which specifies the purchased contents concerned as an inquiry from said terminal unit to said server system is transmitted.

[0011]When an inquiry about contents purchased from a terminal unit to a server system is performed according to invention of this Claim 3, Since information which added a serial number which specifies the purchased contents concerned as an inquiry from a terminal unit to a server system was transmitted, Information about the contents can be easily acquired from contents specified from a serial number on a system, and it is possible to aim at improvement in the service after a commercial transaction by this.

[0012]An on-line merchandise management system concerning invention of Claim 4, In invention of Claim 1, 2, or 3, when sending servicing information about contents from said server system to said terminal unit, a buyer is specified from contents, Information which added servicing information of the contents concerned to said serial number which specifies contents purchased from said server system with the terminal unit concerned to a terminal unit equivalent to said buyer is transmitted.

[0013]When sending servicing information about contents from a server system to a terminal unit according to invention of this Claim 4, a buyer is specified from contents, Since information which added servicing information of the contents concerned to a serial number which specifies contents purchased from a server system with the terminal unit concerned to a terminal unit equivalent to a buyer was transmitted, Information about the contents can be easily distinguished from contents specified from a serial number on a system, and it is possible to aim at improvement in the service after a commercial transaction by this.

[0014]An on-line merchandise management system concerning invention of Claim 5, A server system which is connected to a network, builds virtually an e-market formed of two or more contents on the network concerned, and controls contents selling and its fee collection through said e-market, It is connected to said network, have 1 or two or more terminal units which access said e-market and control content purchase, and said terminal unit, A request means which requires necessary contents of said server system in said e-market built on said network,

Said necessary contents distributed from said server system with a demand of said request means, A reception means which receives a serial number which specifies contents and a buyer who are added and distributed to the contents concerned, Have a memory measure which memorizes necessary contents received by said reception means, and its serial number, and said server system, A serial number creating means which generates said serial number corresponding to said necessary contents with a demand of said request means, and a management tool which manages correspondence relation between a serial number generated by said serial number creating means and its contents, It had a distribution means which adds and distributes a serial number generated by said serial number creating means to said necessary contents demanded by said request means from said terminal unit.

[0015]According to invention of this Claim 5, the serial number which specifies the contents concerned and its buyer in a server system to the necessary contents demanded from a terminal unit is generated, Since the serial number is added to necessary contents, it distributes to a terminal unit and the necessary contents sent from the server system and its serial number were memorized in the terminal unit and the server system, The serial number which specifies contents and its buyer on a system on the basis of contents distribution timing can be shared, and it is possible to employ the service after a commercial transaction, etc. efficiently by this.

[0016]The on-line merchandise management system concerning invention of Claim 6, The server system which is connected to a network, builds virtually the e-market formed of two or more contents on the network concerned, and controls the contents selling by encryption, and its fee collection through said e-market, It is connected to said network, have 1 or two or more terminal units which control the content purchase which accesses said e-market and requires a decoding, and said terminal unit, The request means which requires necessary contents of said server system in said e-market built on said network, When said necessary contents are received by distribution of said server system with a demand of said request means, after transmitting said predetermined notice by the reporting means which transmits a predetermined notice to said server system, and said reporting means, . Make it correspond to the contents received from said server system, and distribute. When the serial number which specifies the contents concerned and buyer is received, have a memory measure which matches and memorizes said received contents necessary [ said ] and said serial number, and said server system, The distribution means which distributes said necessary contents demanded by said request means of said terminal unit, The charging means which performs accounting when said predetermined notice has been transmitted by said reporting means, after distributing said necessary contents by said distribution means, The serial number creating means which generates said serial number corresponding to said necessary contents distributed by said distribution means after accounting is performed by said charging means, It had a management tool which manages the correspondence relation between the serial number generated by said serial number creating means and its contents, and a distribution means which distributes the serial number generated by said serial number creating means to said terminal unit.

[0017]According to invention of this Claim 6, perform accounting, after distributing necessary contents demanded from a terminal unit in a server system, and a serial number which specifies contents concerned and its buyer after that accounting is generated, Since the serial number is distributed to a terminal unit and necessary contents sent from a server system and its serial number were memorized in a terminal unit and a server system, A serial number which specifies contents and its buyer on a system on the basis of fee collection timing can be shared, and it is possible to employ service after a commercial transaction, etc. efficiently by this.

[0018]An on-line merchandise management system concerning invention of Claim 7 had a database with which said server system manages correspondence relation between contents, a serial number, and servicing information in Claim 5 or invention of 6.

[0019]It may be made for Claim 5 or invention of 6 to manage correspondence relation between contents, a serial number, and servicing information with a database in a server system like invention of this Claim 7.

[0020]An on-line merchandise management system concerning invention of Claim 8, When said terminal unit performs an inquiry about said necessary contents to said server system in

invention of Claim 7, Transmit information which added said serial number which specifies the necessary contents concerned as an inquiry to said server system, and said server system, Servicing information corresponding to said serial number added and transmitted in the case of an inquiry is taken out from said database, and it replies to said terminal unit.

[0021]When an inquiry about necessary contents is performed from a terminal unit to a server system according to invention of this Claim 8, In [ transmit information which added a serial number which specifies the necessary contents concerned as an inquiry to a server system, and ] a server system, Since servicing information corresponding to a serial number added and transmitted in the case of an inquiry is taken out from a database and it was made to reply to a terminal unit, Information about the contents can be easily acquired from contents specified from a serial number on a system, and it is possible to aim at improvement in the service after a commercial transaction by this.

[0022]The on-line merchandise management system concerning invention of Claim 9, In Claim 7 or invention of 8, said server system, When sending the servicing information about contents to said terminal unit, while specifying a buyer from the contents concerned with reference to said database, The information which added the servicing information of the contents concerned to the serial number which specifies the contents concerned to the terminal unit equivalent to said buyer is transmitted.

[0023]When sending the servicing information about contents from a server system to a terminal unit according to invention of this Claim 9, while specifying a buyer from the contents concerned with reference to a database in a server system, Since the information which added the servicing information of the contents concerned to the serial number which specifies the contents concerned to the terminal unit equivalent to a buyer was transmitted, The information about the contents can be easily distinguished from the contents specified from a serial number on a system, and it is possible to aim at improvement in the service after a commercial transaction by this.

[0024]The server system of the on-line merchandise management system concerning invention of Claim 10 is provided with the following.

The server system which is connected to a network, builds virtually the e-market formed of two or more contents on the network concerned, and controls contents selling and its fee collection through said e-market.

1 which is connected to said network, accesses said e-market, and controls content purchase, or two or more terminal units.

The serial number creating means which is a server system of the on-line merchandise management system which it had, and generates the serial number which specifies the contents concerned corresponding to necessary contents, and its buyer with the demand of said terminal unit, The management tool which manages the correspondence relation between the serial number generated by said serial number creating means and its contents, and the distribution means which adds and distributes the serial number generated by said necessary contents by said serial number creating means to said terminal unit.

[0025]. According to invention of this Claim 10, correspond to necessary contents with a demand of a terminal unit. Since a serial number which specifies contents concerned and its buyer is generated, a serial number is added and distributed to necessary contents to a terminal unit and correspondence relation between contents and a serial number was managed also itself, A serial number which specifies contents and its buyer between terminal units on the basis of contents distribution timing can be shared, and it is possible to employ service after a commercial transaction, etc. efficiently by this.

[0026]A server system of an on-line merchandise management system concerning invention of Claim 11 is provided with the following.

A server system which is connected to a network, builds virtually an e-market formed of two or more contents on the network concerned, and controls contents selling by encryption, and its fee collection through said e-market.

1 which controls content purchase which is connected to said network, accesses said e-market,

and requires a decoding, or two or more terminal units.

A distribution means which distributes necessary contents which are the server systems of an on-line merchandise management system which it had, and were demanded by said terminal unit, A charging means which performs accounting after distributing said necessary contents by said distribution means, A serial number creating means which generates a serial number which specifies the contents concerned corresponding to said necessary contents distributed by said distribution means, and its buyer after accounting is performed by said charging means, A management tool which manages correspondence relation between a serial number generated by said serial number creating means and its contents, and a distribution means which distributes a serial number generated by said serial number creating means to said terminal unit.

[0027]According to invention of this Claim 11, perform accounting, after distributing necessary contents demanded from a terminal unit, and a serial number which specifies contents concerned and its buyer after that accounting is generated, Since the serial number is distributed to a terminal unit and correspondence relation between contents and a serial number was managed also itself, A serial number which specifies contents and its buyer between terminal units on the basis of fee collection timing can be shared, and it is possible to employ service after a commercial transaction, etc. efficiently by this.

[0028]A server system of an on-line merchandise management system concerning invention of Claim 12 had a database with which said server system manages correspondence relation between contents, a serial number, and servicing information in Claim 10 or invention of 11.

[0029]It may be made for Claim 10 or invention of 11 to manage correspondence relation between contents, a serial number, and servicing information with a database like invention of this Claim 12.

[0030]A server system of an on-line merchandise management system concerning invention of Claim 13, In invention of Claim 12, said on-line merchandise management system, When an inquiry about said necessary contents is performed from said terminal unit to said server system, Are a system to transmit information which added said serial number which specifies the necessary contents concerned as an inquiry to said server system, and said server system, Servicing information corresponding to said serial number added and transmitted in the case of an inquiry is taken out from said database, and it replies to said terminal unit.

[0031]Since the servicing information corresponding to the serial number which adds in the case of an inquiry and is transmitted to an inquiry at it is taken out from a database and it was made to reply to a terminal unit according to invention of this Claim 13, The information about the contents can be easily provided to a terminal unit from the contents specified from the serial number sent from the terminal unit, and it is possible to aim at improvement in the service after a commercial transaction by this.

[0032]The server system of the on-line merchandise management system concerning invention of Claim 14, When sending the servicing information about contents to said terminal unit in Claim 12 or invention of 13, while specifying a buyer from the contents concerned with reference to said database, The information which added the servicing information of the contents concerned to the serial number which specifies the contents concerned to the terminal unit equivalent to said buyer is transmitted.

[0033]When sending the servicing information about contents to a terminal unit according to invention of this Claim 14, while specifying a buyer from the contents concerned with reference to a database, Since the information which added the servicing information of the contents concerned to the serial number which specifies the contents concerned to the terminal unit equivalent to a buyer was transmitted, The information about the contents can be easily distinguished from the contents specified from the serial number sent from the terminal unit, and it is possible to aim at improvement in the service after a commercial transaction by this.

[0034]The terminal unit of the on-line merchandise management system concerning invention of Claim 15 is provided with the following.

The server system which is connected to a network, builds virtually the e-market formed of two or more contents on the network concerned, and controls contents selling and its fee collection

through said e-market.

1 which is connected to said network, accesses said e-market, and controls content purchase, or two or more terminal units.

. A preparation and said server system correspond to necessary contents with the demand of said terminal unit. It is a terminal unit of the on-line merchandise management system having a means to generate the serial number which specifies the contents concerned and buyer, and to add and distribute said generated serial number to said necessary contents. The request means which requires necessary contents of said server system in said e-market built on said network, The memory measure which matches and memorizes the reception means which receives the serial number added and distributed to the contents necessary [ said ] distributed from said server system with a demand of said request means, and the contents concerned, and the necessary contents and serial number received by said reception means.

[0035]According to invention of this Claim 15, in an e-market built on a network, necessary contents are required of a server system, Since a serial number which is added and distributed to necessary contents and the contents concerned distributed from a server system and which specifies contents concerned and its buyer is matched and it was made to memorize, A serial number which specifies contents and its buyer between server systems on the basis of contents distribution timing can be shared, and it is possible to employ service after a commercial transaction, etc. efficiently by this.

[0036]A terminal unit of an on-line merchandise management system concerning invention of Claim 16 is provided with the following.

A server system which is connected to a network, builds virtually an e-market formed of two or more contents on the network concerned, and controls contents selling by encryption, and its fee collection through said e-market.

1 which controls content purchase which is connected to said network, accesses said e-market, and requires a decoding, or two or more terminal units.

After it performs accounting after distributing necessary contents demanded by said terminal unit, and the accounting is performed, a preparation and said server system, It is a terminal unit of an on-line merchandise management system having a means to distribute a serial number which specifies contents concerned and a buyer corresponding to said necessary contents, A request means which requires necessary contents of said server system in said e-market built on said network, When said necessary contents are received by distribution of said server system with a demand of said request means, after transmitting said predetermined notice by reporting means which transmits a predetermined notice to said server system, and said reporting means, A memory measure which matches and memorizes a serial number received corresponding to said received necessary contents and the contents concerned when a serial number which makes correspond to said received necessary contents, and is distributed from said server system is received.

[0037]According to invention of this Claim 16, in the e-market built on the network, necessary contents are required of a server system, When necessary contents are received by distribution of a server system, transmit the predetermined notice which serves as fee collection timing to a server system, and after that, Since the serial number received corresponding to necessary contents and the contents concerned is matched and it was made to memorize when the serial number which makes correspond to necessary contents and is distributed from a server system was received, The serial number which specifies contents and its buyer between server systems on the basis of fee collection timing can be shared, and it is possible to employ the service after a commercial transaction, etc. efficiently by this.

[0038]The terminal unit of the on-line merchandise management system concerning invention of Claim 17, In Claim 15 or invention of 16, said on-line merchandise management system, It is a system which answers the servicing information corresponding to the serial number added and transmitted from said terminal unit in said server system in the case of an inquiry to said terminal unit, Said terminal unit transmits the information which added said serial number which

specifies the necessary contents concerned as an inquiry to said server system, when performing the inquiry about said necessary contents to said server system.

[0039]When the inquiry about necessary contents is performed to a server system according to invention of this Claim 17, Since the information which added the serial number which specifies the necessary contents concerned as an inquiry to a server system was transmitted, The information about the contents corresponding to the serial number can be required from the serial number shared with a server system, and it is possible to aim at improvement in the service after a commercial transaction by this.

[0040]The management method of the on-line merchandise management system concerning invention of Claim 18, The server system which is connected to a network, builds virtually the e-market formed of two or more contents on the network concerned, and controls contents selling and its fee collection through said e-market, 1 or two or more terminal units which are connected to said network, access said e-market, and control content purchase, The 1st process of requiring necessary contents in said e-market which is a management method of a \*\*\*\*\* on-line merchandise management system, and was built from said terminal unit on said network to said server system, With a demand of said 1st process, from said server system to said terminal unit Said necessary contents, The 2nd process of transmitting the serial number which specifies the contents and the buyer who are added and distributed to the contents concerned, and the 3rd process of matching and managing contents necessary [ said ] and its serial number with said terminal unit and said each of server system were included.

[0041]According to invention of this Claim 18, in an e-market built from a terminal unit on a network to a server system, require necessary contents, and from a server system to a terminal unit Necessary contents, A serial number which specifies contents and a buyer who are added and distributed to the contents concerned is transmitted, Since a process of matching and managing necessary contents and its serial number with a terminal unit and said each of server system was used, A serial number which specifies contents and its buyer on a system on the basis of contents distribution timing can be shared, and it is possible to employ service after a commercial transaction, etc. efficiently by this.

[0042]A management method of an on-line merchandise management system concerning invention of Claim 19, A server system which is connected to a network, builds virtually an e-market formed of two or more contents on the network concerned, and controls contents selling by encryption, and its fee collection through said e-market, 1 or two or more terminal units which control content purchase which is connected to said network, accesses said e-market, and requires a decoding, The 1st process of requiring necessary contents of said server system in said e-market which is a management method of a \*\*\*\*\* on-line merchandise management system, and was built from said terminal unit on said network to said server system, The 3rd process of performing accounting in said server system when said necessary contents are received from said server system to said terminal unit with a demand of said 1st process, The 4th process of transmitting a serial number which specifies contents concerned and a buyer corresponding to said necessary contents after accounting by said 3rd process from said server system to said terminal unit, The 5th process of matching and managing contents necessary [ said ] and its serial number with said terminal unit and said each of server system was included.

[0043]According to invention of this Claim 19, in an e-market built from a terminal unit on a network to a server system, necessary contents are required of a server system, When necessary contents are received from a server system to a terminal unit, accounting is performed in a server system, A serial number which specifies necessary contents concerned and a buyer corresponding to contents is transmitted from a server system to a terminal unit after the accounting, Since a process of matching and managing necessary contents and its serial number with a terminal unit and said each of server system was used, A serial number which specifies contents and its buyer on a system on the basis of fee collection timing can be shared, and it is possible to employ service after a commercial transaction, etc. efficiently by this.

[0044]A management method of an on-line merchandise management system concerning

invention of Claim 20, In Claim 18 or invention of 19, said server system is received from said terminal unit, In the 6th process of transmitting information which added a serial number which specifies the contents concerned as an inquiry of contents, and said server system, The 7th process of answering servicing information about said serial number transmitted by said 6th process to said terminal unit was included further.

[0045]According to invention of this Claim 20, a server system is further received from a terminal unit, Since it was made to include the process of answering the servicing information about the serial number which transmitted the information which added the serial number which specifies the contents concerned as an inquiry of contents, and was sent to the server system to a terminal unit, It is possible to be able to acquire the information about the contents from the contents specified from a serial number easily to a terminal unit, and to aim at improvement in the service after a commercial transaction by this on a system.

[0046]The management method of the on-line merchandise management system concerning invention of Claim 21, When the servicing information about contents is sent from said server system to said terminal unit in invention of Claim 18, 19, or 20, While specifying the buyer from contents according to said serial number managed, the 8th process of transmitting the information which added the servicing information of the contents concerned to the serial number which specifies the contents concerned to the terminal unit equivalent to said buyer was included further.

[0047]When sending the servicing information about contents from a server system to a terminal unit further, while specifying a buyer from contents according to the serial number managed according to invention of this Claim 21, Since it was made to include the process of transmitting the information which added the servicing information of the contents concerned to the serial number which specifies the contents concerned to the terminal unit equivalent to a buyer, It is possible to be able to distinguish the information about the contents from the contents specified from a serial number easily, and to aim at improvement in the service after a commercial transaction by this on a system.

[0048]A recording medium concerning invention of Claim 22 is having recorded a program which makes a computer perform a method indicated to any one of the Claims 18-21, It is possible for machine reading of the program to become possible and to realize any one operation of the Claims 18-21 by computer this.

[0049]

[Mode for carrying out the invention]With reference to an accompanying drawing, a suitable embodiment concerning this invention is described in detail below.

(Embodiment 1) An on-line merchandise management system which is this embodiment of the invention 1 is explained functionally first. Drawing 1 is a block diagram showing functionally an on-line merchandise management system by this embodiment of the invention 1. As this on-line merchandise management system was shown in drawing 1, for example, it consists the client 1 and the server system 2 of telephone lines, it is the composition of making it connecting with network INT, such as the Internet and a commercial network, and realizing contents dealing on line. The server system 2 connects a credit / settling server 3 via a communication line, and a credit and settlement of accounts to the client 1 which is a buyer are performed on-line. [0050]Since it becomes a relation of 1 to 1 correspondence with a client and the server system 2 about contents dealing at drawing 1 even when two or more clients are connected to network INT, as the example of representation, Only the client 1 is shown in drawing 1 as a user for simplification of explanation.

[0051]In an on-line merchandise management system by this Embodiment 1, a serial number is given to contents transmitted in the case of contents dealing, and a serial number is transmitted to a purchase place with contents. Therefore, in this on-line merchandise management system, a contents managing form on a system of the client 1 and the server system 2 is unified by a serial number.

[0052]The client 1 comprises contents selection and the User Information input part 11, the contents / key demand part 12, the receive section 13, the decoding part 14, the accumulating part 15, the inquiry part 16, and the servicing information outputting part 17, as shown in drawing

1. In order to perform a purchase request, contents selection and the User Information input part 11 input User Information, while choosing necessary contents from an e-market formed in network INT. Here, when User Information dedicates a purchase amount using a credit etc., it has referred to information, including a name etc. which were registered into a required credit number and a credit company.

[0053]While contents / key demand part 12 performs a purchase request to the server system 2 using information inputted by contents selection and the User Information input part 11 and receives an authentication result in that case, A decode key for decoding contents concerned and its serial number in the case of content reception is required. The receive section 13 receives a decode key corresponding to the contents data while receiving contents data with a serial number from the server system 2 (the below-mentioned contents database 23). This receive section 13 receives also about servicing information, such as upgrade about contents, and pertinent information. A decode key may be applied also to this servicing information.

[0054]The decoding part 14 decodes contents received by the receive section 13 and its serial number with a decode key added in order to decode contents concerned and its serial number. The accumulating part 15 makes contents decoded by the decoding part 14, its serial number, and its servicing information correspond, and carries out Storage and File Management Sub-Division. This accumulating part 15 notifies the completion of purchase to the server system 2, after finishing accumulation.

[0055]When the inquiry part 16 asks servicing information about contents accumulated in the accumulating part 15, it transmits inquiry information to the server system 2 using a serial number by which makes correspond to the contents and Storage and File Management Sub-Division is carried out. The servicing information outputting part 17 outputs servicing information accumulated in the accumulating part 15, and servicing information received in the receive section 13 by output forms, such as a display and printing.

[0056]Although a graphic display and its detailed explanation are omitted, in communication between the client 1 and the server system 2, security technology on Electronic Commerce Technology Division is applied as well as encoding technology. As an example of the security technology, although SET (Secure Electronic Transactions) is preferred, it is not limited to this.

[0057]As shown in drawing 1, the server system 2 for example, It is constituted by the authentication section 21, the contents / key distribution part 22, the contents database 23, serial number generation and the adjunct 24, the key database 25, the contents encryption section 26, inquiry management, the servicing information providing part 27, and the fee collection log database 28. The authentication section 21 attests a user according to a purchase request by the contents / key demand part 12 of the client 1. This authentication section 21 returns an authentication result obtained by that credit to the contents request part 12 while performing a credit between a credit / settling server 3 in the case of attestation.

[0058]When contents / key distribution part 22 is permitted [ purchase ] by attestation of the authentication section 21 (O.K. shows among a figure), while directing contents and its serial number distribution to the contents database 23, According to a key demand of contents / key demand part 12, key distribution is directed in the key database 25. The contents encryption section 26 enciphers contents data provided through a circuit etc. from a contents provider, outputs the enciphered contents to the contents database 23, and outputs decode key data for decoding the contents to the key database 25. This contents encryption section 26 outputs information which shows correspondence relation between enciphered contents and its decode key to the contents database 23.

[0059]The contents database 23 registers correspondence relation between contents and its decode key while registering enciphered contents data which is supplied from the contents encryption section 26. Also about servicing information about registered contents, this contents database 23 is made to correspond for every contents, and is registered. Here, servicing information is supplied by contents provider etc. This contents database 23 distributes predetermined contents data enciphered according to distribution directions of contents / key distribution part 22 to the client 1 (receive section 13).

[0060]Serial number generation and the adjunct 24 generate the serial number of the

predetermined contents data enciphered according to distribution directions of contents / key distribution part 22, add the serial number to predetermined contents data, and distribute it. The key database 25 registers the decode key data supplied from the contents encryption section 26. This key database 25 makes the predetermined contents data enciphered according to distribution directions of contents / key distribution part 22 correspond, and distributes that decode key to the client 1 (receive section 13).

[0061] Inquiry management and the servicing information providing part 27 manage the control which takes out the servicing information applicable to the serial number contained in the inquiry information transmitted from the inquiry part 16 of the client 1 from the contents database 23, and sends to the receive section 13 of the client 1. The fee collection log database 28 registers the accounting information for every buyer according to the purchase completion notification transmitted from the accumulating part 14 of the client 1. This fee collection log database 28 transmits the accounting information for settling accounts to a credit credit / settling server 3, for example for every fixed time.

[0062] Next, an operating sequence is explained. Drawing 2 is a figure explaining an example of the operating sequence of the on-line merchandise management system by Embodiment 1. In the on-line merchandise management system mentioned above, if a purchase request is performed from the client 1 to the server system 2, attestation will be performed by the credit between the server system 2, and the credit credit / settling server 3. If purchase permission is granted to a buyer as a result of the attestation, necessary contents will be distributed from the server system 2 to the client 1 which is a buyer. The serial number generated to contents is added in the case of the distribution. When it is collectively registered by servicing information, the servicing information is also added and distributed.

[0063] Then, when a purchase completion notification is transmitted to the server system 2 from the client 1, a buyer's accounting is carried out in the server system 2, and settlement of accounts is performed between the server system 2, and the credit credit / settling server 3 through fixed time. Thus, a system which shares a serial number which specifies contents and its buyer on a system on the basis of contents distribution timing is built.

[0064] Next, hardware organization which realizes a function mentioned above is explained. First, the client 1 is explained. Drawing 3 is a block diagram showing the client 1 of an on-line merchandise management system by this Embodiment 1 in hardware. As shown in drawing 3, this client 1, CPU — 101 — ROM — 102 — RAM — 103 — application — 104 — a memory — 104 — a display — 105 — a keyboard — 106 — a mouse — 107 — a hard disk drive (HDD) — 108 — a hard disk — (— HD —) — 109 — a floppy disk drive. (FDD) It is the composition of having had a unit of 111, the floppy disk (FD) 112, the modem 113, and interface (I/F) 114 grade, and having combined each unit by bus.

[0065] CPU101 controls operation of the client 1 whole by the various programs of ROM102 or the application 104. the function of drawing 1 which this CPU101 mentioned above — that is, Contents selection and the input operation of the User Information input part 11, purchase request operation of contents / key demand part 12, the receiving operation of the receive section 13, the decoding operation of the decoding part 14, the accumulation operation to the accumulating part 15, inquiry operation of the inquiry part 16, the output operation of the servicing information outputting part 17, etc. are controlled.

[0066] ROM102 stores programs, such as an operating system (OS) for CPU101 to operate, for example. RAM103 is used as a work area of CPU101. The application memory 104 stores the application program for performing contents dealing operation (refer to below-mentioned drawing 7) of this Embodiment 2.

[0067] The display 105 forms a display screen from contents selection operation, contents, etc. The keyboard 106 is provided with the key for a character input, and the mouse 107 carries out pointing of the screen by which display formation was carried out to the display 105. HDD108 controls the read/write of the data to HD109 according to control of CPU101. HD109 is equivalent to the accumulating part 15, and memorizes the data written in by control of HDD108 (accumulation). The contents area 110 which accumulates contents, its serial number, and its servicing information is secured to this HD109.

[0068]FDD111 controls the read/write of the data to FD112 according to control of CPU101. FD112 is equivalent to the accumulating part 15, and memorizes the data written in by control of FDD111 (accumulation). It is connected to network INT via I/F114, and the modem 113 performs the strange recovery at the time of communication. It is connected to network INT via the communication line 116, and I/F114 manages the interface of the network INT and inside.

[0069]Then, the server system 2 is explained. Drawing 4 is a block diagram showing the server system 2 of the on-line charge system by this Embodiment 1 in hardware. This server system 2 is classified into the portion which bears the processing by the side of network INT, and the portion which bears processing between a credit credit / settling server 3 as shown in drawing 4.

[0070]A portion by the side of one network INT is constituted by unit of CPU201, ROM202, RAM203, the application memory 204, the modem 205, I/F206, and disk unit 208 grade, and is connecting each unit to the bus 210A. A portion by the side of the credit credit / settling server 3 of another side is constituted by unit of CPU211, ROM212, RAM213, the application memory 214, the modem 215, and I/F216 grade, and is connecting each unit to the bus 210B. The buses 210A and 210B are connected by the dual memory 209 so that two-way communication is possible.

[0071]First, in a portion by the side of network INT, CPU201 controls operation of the server system 2 whole by a relation with the client 2 by the various programs of ROM202 or the application 204. This CPU201 controls operation etc. of a function of drawing 1 mentioned above, i.e., authentication operation of the authentication section 21, distribution operation of contents / key distribution part 22, serial number generation and operation of the adjunct 24, encryption operation of the contents encryption section 26, inquiry management, and the servicing information providing part 27.

[0072]ROM202 stores programs, such as an operating system (OS) for CPU201 to operate by the network INT side, for example. RAM203 is used as a work area of CPU201. The application memory 204 stores an application program for performing contents dealing operation (refer to below-mentioned drawing 7) of this Embodiment 2.

[0073]The disk unit 208 has the contents database 208A equivalent to the contents database 23, the key database 208B equivalent to the key database 25, and the fee collection log database 208C equivalent to the fee collection log database 28. This disk unit 208 controls read/write of data to the contents database 208A, the key database 208B, and the fee collection log database 208C according to control of CPU201. Here, the contents database 208A has the management table 208D. This management table 208D matches and memorizes that contents number, a serial number, user ID, and servicing information about contents.

[0074]It is connected to network INT via I/F206, and the modem 205 performs the strange recovery at the time of communication. It is connected to network INT via the communication line 207, and I/F206 manages the interface of the network INT and inside.

[0075]Then, in the part by the side of a credit credit / settling server 3, CPU211 controls operation of the server system 2 whole by relation between a credit credit / settling server 3 by the various programs of ROM212 or the application 214. This CPU211 controls the function of drawing 1 mentioned above, i.e., credit operation of the authentication section 21, the settlement-of-accounts operation by the fee collection log database 28 (208C), etc.

[0076]ROM212 stores programs, such as an operating system (OS) for CPU211 to operate by the credit credit / settling server 3 side, for example. RAM213 is used as a work area of CPU211. The application memory 214 stores the application program for performing the credit / settlement-of-accounts operation of this Embodiment 1 (refer to below-mentioned drawing 7).

[0077]It is connected to a credit credit / settling server 3 via I/F216, and the modem 215 performs the strange recovery at the time of communication. It is connected to a credit credit / settling server 3 via the communication line 217, and I/F216 manages the interface of the credit credit / settling server 3, and inside.

[0078]Then, the contents database 208A is explained. Drawing 5 is a figure explaining the contents of the contents database 208A. This contents database 208A puts in a database the contents data (what was enciphered) provided by the contents provider. As contents were

shown in drawing 5, it is divided according to a genre and, specifically, as for any genre, the kind of all the contents is matched in common. The contents data of each genre is made to correspond to the kind of contents, and is memorized.

[0079]The management table 208D mentioned above is formed in this contents database 208A. In this management table 208D, as servicing information matched with each contents, as shown in drawing 5, the latest information on information on a reference, a method of asking, and a new version, etc. are mentioned.

[0080]Then, relation between the contents database 208A and the key database 208B is explained. Drawing 6 is a figure explaining how to manage a correspondence relation of the contents database 208A and the key database 208B in this Embodiment 1. In drawing 6, CD1, CD2, and CD3 -- show enciphered contents data, respectively, and KD1, KD2, and KD3 -- show decode key data, respectively.

[0081]Within the server system 2, a number is given to each contents on management of contents, and the correspondence relation between contents and a decode key is managed by the number. When a number is the management form 1, 2, and 3 --, specifically, for example, As shown in drawing 6, to contents No.1. It is given by the correspondence relation between contents data CD1 and decode key data KD1, and to contents No.2. The correspondence relation between contents data CD2 and decode key data KD2 is given, and the correspondence relation between contents data CD3 and decode key data KD3 is further given to contents No.3. For example, when the purchase request of contents No.1 is carried out, contents data CD1 enciphered and its decode key data KD1 will be distributed to the client 4. [0082]Next, on-line shopping operation is explained. The figure with which the flow chart, drawing 8, and drawing 9 drawing 7 explains operation by this Embodiment 1 to be explain the screen change at the time of on-line shopping. The figure with which drawing 10 explains the data control method by the side of a server system, the figure with which drawing 11 explains the data control method of a client side, and drawing 12 are the figures showing an example of the fee collection log database 208C.

[0083]Commercial transaction operation between the client 1 and the server system 2 is shown in drawing 7. The server system 2 forms a virtual e-market by digital contents to network INT. When the client 1 accesses an e-market through network INT at that time, contents information is provided from the server system 2 to the client 1 (Step S1). In the client 1, an e-market can be displayed on the display 105 based on the contents information. In that case, various kinds of contents are displayed and displayed on an e-market (Step C1).

[0084]A display example of an e-market in the display 105 is shown in drawing 8 (a). The title column 1051a and its contents column 1051b of contents make the display 105 correspond, and it is displayed on it. In the contents column 1051b, check section 1052a-1052b for performing selection or its cancellation of contents which wish to purchase, and 1052c are provided. Here, it is displayed about three contents CNT1, CNT2, and CNT3, and check section 1052a-1052b and 1052c correspond to each contents.

[0085]When order is directed by operation of (Step C2), the keyboard 106, and the mouse 107 after the check section 1052a of contents CNT1 was checked (selection), for example, the information on (Step C3) and its selection contents, User Information is sent to the server system 2. Before this dispatch, the alter operation of User Information is needed.

[0086]The screen for inputting User Information is shown in drawing 8 (b). In order to input User Information into the display 105, As a choice of the purchasing commodity name display column 1053a, the purchase price display column 1053b, and a payment method. As the click column 1053c of a credit card and 1053 d of the click columns of the bundle day of a bank, and membership information. As the user ID input column 1053e and 1053 f of path input columns, and credit card information, in 1053 g of company name input columns, the shelf-life column h, the card number input column 1053i and the card name input column 1053j, and a row. The User Information input screen by the preservation destination specification column 1053k to a disk is displayed.

[0087]Under a display screen, 1053 l. of cancellation icons for canceling alter operation of this User Information and 1053 m of purchase icons for carrying out the dispatch directions of the

purchase request based on inputted User Information are displayed. If a purchase request is performed by operation which is 1053 m of purchase icons after necessary information is inputted to the User Information input screen mentioned above by a user (Step C4), processing will be in a waiting state which waits for an authentication result after that.

[0088]In the server system 2, if a purchase request from the client 1 is received (Step S2), authenticating processing will be performed based on User Information sent by the purchase request (Step S3). As a result of the attestation, when purchase is permitted, (Step S4) and contents which a user of the client 1 chose are read from the contents database 208A, and are distributed via network INT. At the time of the distribution, the management table 208D in the contents database 208A is referred to, a serial number corresponding to contents by which the purchase request was carried out according to the present serial number is generated newly, and the serial number is added to contents (Step S5).

[0089]When servicing information already matches and is memorized by contents by which the purchase request was carried out in the management table 208D, the servicing information is also added collectively. In this distribution, since a key demand enters from the client 1 continuously, decode key data corresponding to contents which should be distributed with reference to the management table 208D also here this time according to that key demand is read from the key database 208B. Thus, contents by which the purchase request was carried out, and its additional information (a serial number, servicing information, and decode key) are distributed one by one (Step S6).

[0090]Thus, after distribution of demand contents and its additional information is performed to the client 1, processing will be in a waiting state which waits for a purchase completion notification to arrive. On the other hand, as a result of attestation in Step S3, when purchase becomes disapproval, a notice of purchase disapproval is transmitted to (Step S4) and the client 1, and this commercial transaction is ended (Step S7).

[0091]Thus, if contents distribution is performed from the server system 2 to the client 1, the management table 208D will serve as the contents of management, as shown in drawing 10. Namely, in giving a number (a sign may be used) to each contents and generating a serial number to the contents number, respectively. As shown in drawing 10, a serial number and user ID (an address may be used) which specifies a buyer make it correspond, and Storage and File Management Sub-Division is carried out according to a contents number. Servicing information is also matched and memorized according to a contents number.

[0092]In an example of drawing 10, servicing information SV1, three serial No(es).CD1-1, and No.CD1-2 and CD1-3 make it correspond to contents No.1, and it is managed. User ID "AAA", "BBB", and "CCC" support serial No.CD1-1 and No.CD1-2 and CD1-3, respectively. Similarly, servicing information SV2, and two serial No(es).CD2-1 and No.CD2-2 make it correspond to contents No.2, and it is managed. User ID "DOD" and "EEE" support serial No.CD2-1 and No.CD2-2, respectively. Although less than contents No.3 is the same, a graphic display and its explanation are omitted.

[0093]For example, when this buyer is user ID "AAA", it means purchasing contents of contents No.1 on the management table 208D, and a serial number in that case is set to CD1-1. Since \*\* and servicing information SV1 exist in contents of this contents No.1 just, it will be added at the time of contents distribution, and will distribute.

[0094]Now, when purchase permission gets down from the server system 2 and the demanded contents and its additional information have been transmitted, after receiving and decoding (Step C5) and its contents, operation accumulated in the contents area 110 in HD109 is performed (Step C6). Here, as the midst of content reception was shown in drawing 9 (a), the message 1054a is displayed on the display 105 like "under content reception." As the midst of decode key reception was shown in drawing 9 (b), the message 1054a is displayed on the display 105 like "under decode key reception." On the other hand, when the notice of purchase disapproval arrives, the message of a purport [ that it cannot purchase on (Step C5) and the display 105 ] is displayed (Step C7), and this commercial transaction operation is ended.

[0095]When reception of contents, decoding, and accumulation are completed in Step C6, it is judged whether the content purchase was completed normally (Step C8). When it is able to

purchase normally, a purchase completion notification is sent to (Step C8) and the server system 2 (Step C9). In this case, as shown in drawing 9 (c), the message 1054c is displayed on the display 105 like "the inside of a purchase completion notification." On the other hand, when content purchase is not able to be normally completed by poor communication and poor decoding, it is ended as what (Step C8) and this commercial transaction did not have.

[0096]When accumulating purchase contents to HD109 as mentioned above, as shown in drawing 11, it is made to correspond to a serial number and contents and its servicing information are memorized. In other words, contents and servicing information are managed by serial number. For example, when a user (user ID "AAA") of the client 1 has purchased three contents data CD1, CD3, and CD5. A management top takes a form which makes it correspond to serial No.CD1-1, CD3-2, and CD5-1, respectively, and memorizes contents data CD1/servicing information SV1, CD3/SV3, and CD5/SV5.

[0097]In the server system 2, when a purchase completion notification is received (Step S8), the buyer's accounting is performed as that by which contents were normally purchased by the client 1 which is a buyer (step S9). Information charged by this accounting is managed as shown in drawing 12. Namely, in the fee collection log database 208B shown in drawing 12, when a user name of the client 1 is AAA, as for the user AAA, the log of accounting information LA1, LA2, and LA3 is carried out [ in October 1, 1997 and the same month ] on the 15th in the same month for ten days, respectively. When a user name of other clients is BBB, for the user BBB, the log of accounting information LB1 and LB2 is carried out on the 7th in October 1, 1997 and the same month, respectively.

[0098]On the other hand, when a purchase completion notification is not received (Step S8), processing is completed, without carrying out the buyer's accounting. It may be made to stand by about accounting, unless smooth employment of a system is barred until purchase \*\*\*\*\* receives a message.

[0099]Next, inquiry operation is explained. Drawing 13 is a flow chart explaining operation about an inquiry by this Embodiment 1, and drawing 14 is a figure explaining a screen change at the time of inquiry operation.

[0100]When performing an inquiry about contents purchased from the client 1 to the server system 2, a serial number added to purchased contents already is used. Therefore, in the client 1, contents which require an inquiry using a serial number are chosen on the display 1056. At the time of selection, as shown in drawing 14 (a), the required information 1055a is displayed about contents which wish an inquiry, for example. In that case, the cancellation icon 1056 and the transmitting icon 1057 are displayed.

[0101]Here, when selection operation of the cancellation icon 1056 is carried out, this inquiry is canceled, and on the other hand, when selection operation of the transmitting icon 1057 is carried out, inquiry dispatch about the above-mentioned information 1055a is performed (Step C101). And like drawing 14 (b), the transmitting icon 1057 disappears, instead the message 1055b of a purport "under inquiry" is displayed.

[0102]It will be in a waiting state which waits for a reply about an inquiry sent at Step C101 to arrive after that. A flow chart shown in drawing 13 is correspondence with inquiry operation and its reply operation, and explains only a series of flows. Actually, since it carries out by exchange of e-mail, it does not wait until the reply is after an inquiry.

[0103]In the server system 2, if there is an inquiry from the client 1 (Step S101), A serial number added to the inquiry is tested by comparison to the management table 208D, and processing which answers servicing information which makes correspond to the serial number and is memorized is performed (Step S102).

[0104]Thus, if a reply to the client 1 is performed, the reply will be received in the client 1 (Step C102). And while servicing information to which it replied to an inquiry is displayed on the display 105, it is saved HD109. As an example answer, as shown in drawing 14 (c), the answer message 1055c of a purport of "since servicing information upgrade was carried out --" is displayed.

[0105]Servicing information can also be conversely distributed from the server system 2 to the client 1. Next, service distribution operation is explained. Drawing 15 is a flow chart explaining operation about service distribution by this Embodiment 1, and drawing 16 is a figure explaining a

screen change at the time of service distribution operation.

[0106]In the server system 2, as for this distribution service, renewal of the management table 208D of the contents database 208A serves as a trigger. Then, in the server system 2, if update processes, such as new registration and upgrade, are performed about contents (Step S111), a serial number relevant to updated contents will be extracted from the management table 208D (Step S112).

[0107]And when a serial number related from the management table 208D is able to be extracted, a serial number and servicing information about updating contents are distributed to the client 1 based on user ID which makes correspond to the serial number and is memorized (106).

[0108]In the client 1, a serial number and servicing information about updating contents transmitted from the server system 2 are received by this (Step C111). Information, including a title about the received contents, a serial number, etc., and servicing information are displayed on the display 105 (Step C112). For example, a title of contents is "aaa", and if serial No. is CD1-1, as shown in drawing 16, the contents of title aaa and serial No.CD1-1 and servicing information will be displayed on 1055 d of servicing information display columns by the display 105. These-displayed contents are saved by a storage configuration shown in drawing 11 in the contents area 110 of HD109 (Step C113).

[0109]Since a serial number which specifies contents and its buyer on a system on the basis of contents distribution timing was shared according to this Embodiment 1 as explained above, it is possible to employ service after a commercial transaction, etc. efficiently.

[0110]In the server system 2, on-line merchandise management which raised operation efficiency by managing correspondence relation between contents, a serial number, and servicing information with a database is possible.

[0111]Since information about the contents is easily acquirable from contents specified from a serial number on a system, it is possible to aim at improvement in the service after a commercial transaction.

[0112]Since information about the contents can be easily distinguished from contents specified from a serial number on a system, it is possible to aim at improvement in the service after a commercial transaction.

[0113]accepting a demand of a client in (Embodiment 2), now Embodiment 1 mentioned above — contents — simultaneously, although he was trying to transmit a serial number, After charging in contents dealing, it may be made to transmit a serial number to a client like Embodiment 2 described below.

[0114]First, an on-line merchandise management system in this embodiment of the invention 2 is explained functionally. Drawing 17 is a block diagram showing functionally an on-line merchandise management system by this embodiment of the invention 2. This on-line merchandise management system is the composition of making it connecting with the same network INT as Embodiment 1 which mentioned above the client 4 and the server system 5, and realizing contents dealing on line, as shown in drawing 17. The server system 5 connects same credit / the settling server 3 as the above-mentioned Embodiment 1 via a communication line, and a credit and settlement of accounts to the client 4 which is a buyer are performed on-line.

[0115]Since it becomes a relation of 1 to 1 correspondence with a client and the server system 5 about contents dealing at drawing 17 even when two or more clients are connected to network INT, as the example of representation, Only the client 4 is shown in drawing 17 as a user for simplification of explanation.

[0116]About the portion which achieves the same function as Embodiment 1 mentioned above about the internal configuration of the client 4 and the server system 5 which are explained below, detailed explanation is omitted using the same name and number.

[0117]The clients 4 are the composition of Embodiment 1 mentioned above, and the same composition, as shown in drawing 17. That is, the client 4 comprises contents selection and the User Information input part 11, the contents / key demand part 12, the receive section 13, the decoding part 14, the accumulating part 15, the inquiry part 16, and the servicing information outputting part 17, for example.

[0118]As shown in drawing 17, on the other hand, the server system 5 for example, It is constituted by the authentication section 21, the contents / key distribution part 22, the contents database 23, the serial number generation part 51, the key database 25, the contents encryption section 26, inquiry management, the servicing information providing part 27, and the fee collection log database 52. In this server system 5, while replacing serial number generation and the adjunct 24 of Embodiment 1 and forming the serial number generation part 51, the fee collection log database 28 of Embodiment 1 is replaced, and the fee collection log database 52 is formed.

[0119]The serial number generation part 51 generates a serial number of predetermined contents data enciphered when completion of accounting was notified by the fee collection log database 52, and distributes the serial number. Although a form which serial number generation and the adjunct 24 transmit with contents distribution was taken in Embodiment 1 mentioned above, a form which distributes a serial number of contents which became that accounting object after fee collection is taken in this Embodiment 2.

[0120]The fee collection log database 52 sends a notice of the completion of fee collection to the serial number generation part 51 while registering accounting information for every buyer according to a purchase completion notification transmitted from the accumulating part 14 of the client 1. This fee collection log database 52 transmits accounting information for settling accounts to a credit credit / settling server 3, for example for every fixed time.

[0121]Then, an operating sequence is explained. Drawing 18 is a figure explaining an example of an operating sequence of an on-line merchandise management system by this Embodiment 2. In an on-line merchandise management system mentioned above, if a purchase request is performed from the client 4 to the server system 5, attestation will be performed by credit between the server system 5, and the credit credit / settling server 3. If purchase permission is granted to a buyer as a result of the attestation, necessary contents and its decode key will be distributed from the server system 5 to the client 4 which is a buyer.

[0122]Then, when a purchase completion notification is transmitted to the server system 5 from the client 4, a buyer's accounting is carried out in the server system 5, a serial number is generated to contents to the timing, and it distributes to the client 4. In the case of the distribution, when it is collectively registered by servicing information, the servicing information is also added and distributed. Furthermore, settlement of accounts is performed between the server system 2, and the credit credit / settling server 3 through fixed time. Thus, the system which shares the serial number which specifies contents and its buyer on a system on the basis of fee collection timing is built.

[0123]Next, the on-line shopping operation by this Embodiment 2 is explained. Drawing 19 is a flow chart explaining operation by this Embodiment 2. The commercial transaction operation between the client 4 and the server system 5 is shown in drawing 19. The server system 5 forms the virtual e-market by digital contents to network INT. When the client 4 accesses an e-market through network INT at that time, contents information is provided from the server system 5 to the client 4 (Step S11). In the client 4, an e-market can be displayed on the display 105 based on the contents information. In that case, various kinds of contents are displayed and displayed on an e-market like Embodiment 1 mentioned above (Step C11).

[0124]And like Embodiment 1 mentioned above, when order is directed by operation of (Step C12), the keyboard 106, and the mouse 107 after selection of contents, information on (Step C13) and its selection contents and User Information are sent to the server system 2. User Information will be inputted before this dispatch. If a purchase request is performed after necessary information is inputted by user to the User Information input screen (Step C14), processing will be in a waiting state which waits for an authentication result after that.

[0125]In the server system 5, if a purchase request from the client 4 is received (Step S12), authenticating processing will be performed based on User Information sent by the purchase request (Step S13). As a result of the attestation, when purchase is permitted, (Step S14) and contents which a user of the client 4 chose are read from the contents database 208A. Since a key demand enters from the client 4 at this time, with reference to the management table 208D, decode key data corresponding to contents which should be distributed this time according to

that key demand is read from the key database 208B. Thus, contents by which the purchase request was carried out, and its decode key are distributed (Step S16).

[0126]Thus, after distribution of demand contents and its decode key is performed to the client 4, processing will be in a waiting state which waits for a purchase completion notification to arrive. On the other hand, as a result of attestation in Step S13, when purchase becomes disapproval, a notice of purchase disapproval is transmitted to (Step S14) and the client 4, and this commercial transaction is ended (Step S16).

[0127]Now, in the client 4, purchase permission gets down from the server system 5. When demanded contents and its decode key have been transmitted, after receiving and decoding (Step C15) and its contents, operation accumulated in the contents area 110 in HD109 is performed (Step C16). On the other hand, when a notice of purchase disapproval arrives, a message of a purport [ that it cannot purchase on (Step C15) and the display 105 ] is displayed (Step C17), and this commercial transaction operation is ended.

[0128]When reception of contents, decoding, and accumulation are completed in Step C16, it is judged whether the content purchase was completed normally (Step C18). When it is able to purchase normally, a purchase completion notification is sent to (Step C18) and the server system 5 (Step C19). On the other hand, when content purchase is not able to be normally completed by poor communication and poor decoding, it is ended as what (Step C18) and this commercial transaction did not have.

[0129]In the server system 5, when a purchase completion notification is received (Step S17), the buyer's accounting is performed like Embodiment 1 mentioned above as that by which contents were normally purchased by the client 4 which is a buyer (Step S18). On the other hand, when a purchase completion notification is not received (Step S17), processing is completed, without carrying out the buyer's accounting. It may be made to stand by about accounting, unless smooth employment of a system is barred until purchase \*\*\*\*\* receives a message.

[0130]In the server system 5, after this, the serial number corresponding to purchase contents is generated, and that serial number is registered into the management table 208D. Thereby, like Embodiment 1 mentioned above, the management table 208D is made to correspond to the number (contents number) of purchase contents, and a serial number, user ID, and servicing information are managed. According to this Embodiment 2, after this accounting is performed, that serial number and servicing information are distributed to the client 4 (Step S19).

[0131]Thus, in the client 4, the serial number which makes correspond to purchased contents and is distributed, and servicing information match, and accumulation management is carried out to received contents already (Step C20). At the client 4, Embodiment 1 mentioned above and the same management form can be built in this stage.

[0132]Since a serial number which specifies contents and its buyer on a system on the basis of fee collection timing was shared [ according to this Embodiment 2 ] in addition to the same effect as Embodiment 1 mentioned above as explained above, It is possible to employ service after a commercial transaction, etc. efficiently.

[0133]Also in this Embodiment 2, it is possible to perform an inquiry from the client 4 and service distribution from the server system 5 like Embodiment 1 mentioned above.

[0134]

[Effect of the Invention]As explained above, according to invention of Claim 1, in contents selling. While transmitting the information which added the serial number which specifies the contents concerned and buyer as the contents in which the terminal unit concerned carries out a purchase request from a server system to a terminal unit, Since the correspondence relation between contents and a buyer was managed by the serial number, The serial number which specifies contents and its buyer on a system on the basis of contents transfer timing can be shared, and the effect that the on-line merchandise management system which can employ the service after a commercial transaction, etc. efficiently by this is obtained is done so.

[0135]When accounting is performed by the contents selling to a terminal unit from a server system via a network according to invention of Claim 2, While transmitting the serial number which specifies the contents and the buyer whom the terminal unit concerned purchased from

the server system to the terminal unit, Since the correspondence relation between contents and a buyer was managed by the serial number, The serial number which specifies contents and its buyer on a system on the basis of fee collection timing can be shared, and the effect that the on-line merchandise management system which can employ the service after a commercial transaction, etc. efficiently by this is obtained is done so.

[0136]When the inquiry about the contents purchased from the terminal unit to the server system is performed in Claim 1 or invention of 2 according to invention of Claim 3, Since the information which added the serial number which specifies the purchased contents concerned as an inquiry from a terminal unit to a server system was transmitted, The information about the contents can be easily acquired from the contents specified from a serial number on a system, and the effect that the on-line merchandise management system which can aim at improvement in the service after a commercial transaction by this is obtained is done so.

[0137]In [ according to invention of Claim 4 ] invention of Claim 1, 2, or 3, When sending the servicing information about contents from a server system to a terminal unit, a buyer is specified from contents, Since the information which added the servicing information of the contents concerned to the serial number which specifies the contents purchased from the server system with the terminal unit concerned to the terminal unit equivalent to a buyer was transmitted, The information about the contents can be easily distinguished from the contents specified from a serial number on a system, and the effect that the on-line merchandise management system which can aim at improvement in the service after a commercial transaction by this is obtained is done so.

[0138]According to invention of Claim 5, the serial number which specifies the contents concerned and its buyer in a server system to the necessary contents demanded from a terminal unit is generated, Since the serial number is added to necessary contents, it distributes to a terminal unit and the necessary contents sent from the server system and its serial number were memorized in the terminal unit and the server system, The serial number which specifies contents and its buyer on a system on the basis of contents distribution timing can be shared, and the effect that the on-line merchandise management system which can employ the service after a commercial transaction, etc. efficiently by this is obtained is done so.

[0139]According to invention of Claim 6, perform accounting, after distributing the necessary contents demanded from a terminal unit in a server system, and the serial number which specifies the contents concerned and its buyer after the accounting is generated, Since the serial number is distributed to a terminal unit and the necessary contents sent from the server system and its serial number were memorized in the terminal unit and the server system, The serial number which specifies contents and its buyer on a system on the basis of fee collection timing can be shared, and the effect that the on-line merchandise management system which can employ the service after a commercial transaction, etc. efficiently by this is obtained is done so.

[0140]According to invention of Claim 7, in Claim 5 or invention of 6, the effect that the on-line merchandise management system which raised operation efficiency by managing the correspondence relation between contents, a serial number, and servicing information with a database is obtained is done so in a server system.

[0141]When the inquiry about necessary contents is performed from a terminal unit to a server system in invention of Claim 7 according to invention of Claim 8, In [ transmit the information which added the serial number which specifies the necessary contents concerned as an inquiry to a server system, and ] a server system, Since the servicing information corresponding to the serial number added and transmitted in the case of an inquiry is taken out from a database and it was made to reply to a terminal unit, The information about the contents can be easily acquired from the contents specified from a serial number on a system, and the effect that the on-line merchandise management system which can aim at improvement in the service after a commercial transaction by this is obtained is done so.

[0142]In [ when sending the servicing information about contents from a server system to a terminal unit in Claim 7 or invention of 8 according to invention of Claim 9 ] a server system, While specifying a buyer from the contents concerned with reference to a database, Since the

information which added the servicing information of the contents concerned to the serial number which specifies the contents concerned to the terminal unit equivalent to a buyer was transmitted. The information about the contents can be easily distinguished from the contents specified from a serial number on a system, and the effect that the on-line merchandise management system which can aim at improvement in the service after a commercial transaction by this is obtained is done so.

[0143] According to invention of Claim 10, correspond to necessary contents with the demand of a terminal unit. Since the serial number which specifies the contents concerned and its buyer is generated, a serial number is added and distributed to necessary contents to a terminal unit and the correspondence relation between contents and a serial number was managed also itself, Can share the serial number which specifies contents and its buyer between terminal units on the basis of contents distribution timing, and by this. The effect that the server system of the on-line merchandise management system which can employ the service after a commercial transaction, etc. efficiently is obtained is done so.

[0144] According to invention of Claim 11, perform accounting, after distributing the necessary contents demanded from a terminal unit, and the serial number which specifies the contents concerned and its buyer after the accounting is generated, Since the serial number is distributed to a terminal unit and the correspondence relation between contents and a serial number was managed also itself, Can share the serial number which specifies contents and its buyer between terminal units on the basis of fee collection timing, and by this. The effect that the server system of the on-line merchandise management system which can employ the service after a commercial transaction, etc. efficiently is obtained is done so.

[0145] According to invention of Claim 12, in Claim 10 or invention of 11, the effect that the server system of the on-line merchandise management system which managed the correspondence relation between contents, a serial number, and servicing information, and raised operation efficiency with the database is obtained is done so.

[0146] Since the servicing information corresponding to the serial number which adds in the case of an inquiry and is transmitted to an inquiry in invention of Claim 12 at it is taken out from a database and it was made to reply to a terminal unit according to invention of Claim 13, From the contents specified from the serial number sent from the terminal unit, can provide the information about the contents easily to a terminal unit, and by this. The effect that the server system of the on-line merchandise management system which can aim at improvement in the service after a commercial transaction is obtained is done so.

[0147] When sending the servicing information about contents to a terminal unit in Claim 12 or invention of 13, while specifying a buyer from the contents concerned with reference to a database according to invention of Claim 14, Since the information which added the servicing information of the contents concerned to the serial number which specifies the contents concerned to the terminal unit equivalent to a buyer was transmitted, Can distinguish the information about the contents from the contents specified from the serial number sent from the terminal unit easily, and by this. The effect that the server system of the on-line merchandise management system which can aim at improvement in the service after a commercial transaction is obtained is done so.

[0148] According to invention of Claim 15, in the e-market built on the network, necessary contents are required of a server system, Since the serial number which is added and distributed to the necessary contents and the contents concerned distributed from a server system and which specifies the contents concerned and its buyer is matched and it was made to memorize, Can share the serial number which specifies contents and its buyer between server systems on the basis of contents distribution timing, and by this. The effect that the terminal unit of the on-line merchandise management system which can employ the service after a commercial transaction, etc. efficiently is obtained is done so.

[0149] According to invention of Claim 16, in the e-market built on the network, necessary contents are required of a server system, When necessary contents are received by distribution of a server system, transmit the predetermined notice which serves as fee collection timing to a server system, and after that, Since the serial number received corresponding to necessary

contents and the contents concerned is matched and it was made to memorize when the serial number which makes correspond to necessary contents and is distributed from a server system was received, Can share the serial number which specifies contents and its buyer between server systems on the basis of fee collection timing, and by this. The effect that the terminal unit of the on-line merchandise management system which can employ the service after a commercial transaction, etc. efficiently is obtained is done so.

[0150]In [ according to invention of Claim 17 ] Claim 15 or invention of 16, Since the information which added the serial number which specifies the necessary contents concerned as an inquiry to a server system was transmitted when the inquiry about necessary contents was performed to a server system, The information about the contents corresponding to the serial number can be required from the serial number shared with a server system, and the effect that the terminal unit of the on-line merchandise management system which can aim at improvement in the service after a commercial transaction by this is obtained is done so.

[0151]According to invention of Claim 18, in the e-market built from the terminal unit on the network to the server system, require necessary contents, and from a server system to a terminal unit Necessary contents, The serial number which specifies the contents and the buyer who are added and distributed to the contents concerned is transmitted, Since the process of matching and managing necessary contents and its serial number with a terminal unit and said each of server system was used, Can share the serial number which specifies contents and its buyer on a system on the basis of contents distribution timing, and by this. The effect that the management method of the on-line merchandise management system which can employ the service after a commercial transaction, etc. efficiently is acquired is done so.

[0152]According to invention of Claim 19, in the e-market built from the terminal unit on the network to the server system, necessary contents are required of a server system, When necessary contents are received from a server system to a terminal unit, accounting is performed in a server system, The serial number which specifies the necessary contents concerned and buyer corresponding to contents is transmitted from a server system to a terminal unit after the accounting, Since the process of matching and managing necessary contents and its serial number with a terminal unit and said each of server system was used, The serial number which specifies contents and its buyer on a system on the basis of fee collection timing can be shared, and the effect that the management method of the on-line merchandise management system which can employ the service after a commercial transaction, etc. efficiently by this is acquired is done so.

[0153]In [ according to invention of Claim 20 ] Claim 18 or invention of 19, The information which added the serial number which specifies the contents concerned as an inquiry of contents from a terminal unit to a server system is transmitted, Since it was made to include the process of answering the servicing information about the serial number sent to the server system to a terminal unit, On a system, can acquire the information about the contents from the contents specified from a serial number easily to a terminal unit, and by this. The effect that the management method of the on-line merchandise management system which can aim at improvement in the service after a commercial transaction is acquired is done so.

[0154]In [ according to invention of Claim 21 ] invention of Claim 18, 19, or 20, When sending the servicing information about contents from a server system to a terminal unit, while specifying a buyer from contents according to the serial number managed, Since it was made to include the process of transmitting the information which added the servicing information of the contents concerned to the serial number which specifies the contents concerned to the terminal unit equivalent to a buyer, On a system, the information about the contents can be easily distinguished from the contents specified from a serial number, and the effect that the management method of the on-line merchandise management system which can aim at improvement in the service after a commercial transaction by this is acquired is done so.

[0155]By what the program which makes a computer perform the method indicated to any one of the Claims 18-21 was recorded for according to invention of Claim 22. Machine reading of the program becomes possible and the effect that the recording medium which can realize any one operation of the Claims 18-21 by computer is obtained by this is done so.

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[Translation done.]

**\* NOTICES \***

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- 1.This document has been translated by computer. So the translation may not reflect the original precisely.
- 2.\*\*\*\* shows the word which can not be translated.
- 3.In the drawings, any words are not translated.

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**DESCRIPTION OF DRAWINGS**

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**[Brief Description of the Drawings]**

[Drawing 1]It is a block diagram showing functionally the on-line merchandise management system by this embodiment of the invention 1.

[Drawing 2]It is a figure explaining an example of the operating sequence of the on-line merchandise management system by Embodiment 1.

[Drawing 3]It is a block diagram showing the client of the on-line merchandise management system by Embodiment 1 in hardware.

[Drawing 4]It is a block diagram showing the server system of the on-line merchandise management system by Embodiment 1 in hardware.

[Drawing 5]It is a figure explaining the contents of the contents database in Embodiment 1.

[Drawing 6]It is a figure explaining how to manage the correspondence relation of the contents database and key database in Embodiment 1.

[Drawing 7]It is a flow chart explaining operation by Embodiment 1.

[Drawing 8]It is a figure explaining the screen change at the time of the on-line shopping by Embodiment 1.

[Drawing 9]It is a figure explaining the screen change at the time of the on-line shopping by Embodiment 1.

[Drawing 10]It is a figure explaining the data control method by the side of the server system by Embodiment 1.

[Drawing 11]It is a figure explaining the data control method of the client side by Embodiment 1.

[Drawing 12]It is a figure showing an example of the fee collection log database in Embodiment 1.

[Drawing 13]It is a flow chart explaining the operation about the inquiry by Embodiment 1.

[Drawing 14]It is a figure which illustrates the screen change at the time of inquiry operation in Embodiment 1.

[Drawing 15]It is a flow chart explaining the operation about the service distribution by Embodiment 1.

[Drawing 16]It is a figure which illustrates the screen change at the time of service distribution operation in Embodiment 1.

[Drawing 17]It is a block diagram showing functionally the on-line merchandise management system by this embodiment of the invention 2.

[Drawing 18]It is a figure explaining an example of the operating sequence of the on-line merchandise management system by Embodiment 2.

[Drawing 19]It is a flow chart explaining operation by Embodiment 2.

**[Explanations of letters or numerals]**

1 Client

2 Server system

11 Contents selection and the User Information input part

12 Contents / key demand part

13 Receive section

14 Decoding part

15 Accumulating part  
16 Inquiry part  
17 Servicing information outputting part  
21 Authentication section  
22 Contents / key distribution part  
23,208A Contents database  
24 Serial number generation and an adjunct  
25,208B Key database  
26 Contents encryption section  
27 Inquiry management and a servicing information providing part  
28,208C Fee collection log database  
51 Serial number generation part  
52 Fee collection log database  
101,201 CPU  
102,202 ROM  
103,203 RAM  
104,204 Application memory  
105 Display  
106 Keyboard  
107 Mouse  
109 HD  
112 FD  
113,205 Modem  
208,219 disk units

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[Translation done.]